

## WHAT IS CLAIMED IS

1. A gas mixing device comprising:

a store tank having an interior hollow, said interior hollow defined by an upper wall, an annular wall and a bottom wall, an air outlet valve provided in said upper wall, an air outlet tube  
5 connected with said air outlet valve:

a mixing chamber provided in said interior hollow of said store tank, said mixing chamber extending down from said upper wall to near the bottom of said store tank, plural small holes formed in an annular wall near the lower end of said mixing  
10 chamber, a vaporized fuel oil outlet tube connected with an upper end of said mixing chamber:

an intake tube provided to extend down from the upper end of said mixing chamber, said intake tube having an intake, an bubble producer provided at a lower end of said intake tube and  
15 having plural bubble stones therein: and,

a nozzle connected both with said air outlet tube and said vaporized fuel oil outlet tube so as to send both vaporized fuel oil and pressured air synchronously to said nozzle and then to a burning appliance and installation.

20 2. A gas mixing device comprising a store tank and a nozzle, said nozzle comprising:

a nozzle body provided with a lengthwise chamber, female threads formed in an inner wall of a partial rear portion of said lengthwise chamber, a cone-shaped outlet formed in a front end of  
25 said nozzle body, a lateral hole formed at an intermediate wall of

said lengthwise chamber and formed with male threads, an air connect tube connected and engaging with said male threads of said lateral hole, male threads formed on an outer surface of said nozzle body, a small-diameter section and a large-diameter section behind said small-diameter section formed in a front portion of said nozzle body, an O-shaped ring fitting around said large-diameter section:

a pressure-adding tube positioned in said lengthwise chamber of said nozzle body, said pressure-adding tube having male threads to engage with said female threads of said nozzle body, a center lengthwise hole and an O-shaped ring fitting around its outer surface:

a pressure-adding cylinder having female threads to engage with said male threads of said nozzle body, an outlet, male threads and an O-shaped ring fitting around its outer surface: and,

a cap having female threads to engage with said male threads of said pressure-adding cylinder, a cone-shaped outlet formed in a front end surface of said cap, vaporized fuel oil sprayed out in a radial direction after passing through said cap and supplied to a burning appliance and installation

3. The gas mixing device as claimed in Claim 2, wherein said outlet of said pressure-adding cylinder has a diameter smaller than that of said cone-shaped outlet of said nozzle body.

4. The gas-mixing device as claimed in Claim 2, said cap has said cone-shaped outlet with a diameter smaller than that of said

outlet of said pressure-adding cylinder for producing pressure adding and vaporizing effect.